

Appl. No. 10/725,960
Response dated April 16, 2004
Reply to Office Action of Jan 16, 2004



IN THE CLAIMS:

Please amend the claims to read as follows:

- 1. (original) A method for consolidating an earth stratum situated in a subgrade by withdrawing water from the subgrade comprising the steps of:
- a) placing a plurality of generally vertically positioned drainage strips in the earth stratum;
 - b) connecting the drainage strips with a generally horizontally extended drainage means to provide water transfer between them;
 - c) forming an air sealing layer directly over the generally horizontal drainage means and the closing of the surface of the soil;
 - d) connecting the generally horizontal drainage means to a pump; and
 - e) discharging fluid from the generally horizontal drainage means using the pump.
2. (original) The method of claim 1, in which a trench is made from the ground surface and the vertical drainage strips extend downwardly from the bottom of the trench.
3. (original) The method of claim 2, in which the trench is formed with a plough supported by a mobile carriage device and a vertical drainage strips are positioned during use by means of said device and the horizontal drainage means each time being arranged after that until the next vertical drainage strip has to be arranged.
4. (original) The method of claim 3, in which simultaneously with the arrangement of the horizontal drainage means or immediately after that, the air sealing layer is being arranged by means of the device.
5. (original) The method of claim 4, in which the air sealing layer is arranged by removing soil material from the trench walls and arranging it on the horizontal drainage means.
6. (original) The method of claim 4, in which the air sealing layer is arranged by arranging a sealing foil layer on the horizontal drainage means.
7. (original) The method of claim 4, in which the air sealing layer is arranged by arranging

a sealing layer of plastic material on the horizontal drainage means.

8. (original) The method of claim 7 wherein the plastic material is bentonite.
9. (canceled)
10. (original) The method of claim 1 in which the trench is finally closed off with soil material up to approximately the original surface.
11. (original) The method of claim 1 in which the vertical drainage strips are taken from a supply and after each strip has been arranged are separated by cutting through at a level above the trench bottom.
12. (original) The method of claim 10, in which the cutting through takes place in the device.
13. (original) A soil consolidation apparatus for consolidating a selected earth stratum, comprising:
 - a) movable carriage;
 - b) means for making a trench from the ground surface down to at least the upper side of the earth stratum to be consolidated;
 - c) means for the stepwise supplying of vertical drainage strips from a supply and driving each said strip into the earth stratum;
 - d) means for supplying a horizontal drainage means in the trench bottom that is in fluid communication with the strips.
14. (original) The soil consolidation apparatus of claim 13, in which the device is further provided with means for cutting through the drainage ribbon at a selected level above the trench bottom.
15. (original) The soil consolidation apparatus of claim 14, in which the means for cutting through includes a movable blade and an anvil for said blade.
16. (original) The soil consolidation apparatus of claim 15 in which the blade has been arranged on a first arm of a lever rotatable about a horizontal center line, a second arm of said lever

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being connected to a hydraulic cylinder.

17. (original) The soil consolidation apparatus of claim 13 in which the trench-making means includes a plough.

18. (original) The soil consolidation apparatus of claim 17, in which at its rear side the plough is provided with means for removing soil material from the trench walls and for pressing it downward.

19. (original) The soil consolidation apparatus of claim 17 in which at its rear side the plough is provided with means for supplying the horizontal drainage means, from a supply roll.

20. (original) The soil consolidation apparatus of claim 17 furthermore provided with means for pivoting the plough about a horizontal axis of rotation, between a trench-making active position and an upwardly tilted moving position.

21. (original) The method of claim 1, performed on a subaqueous soil.

22-43. (canceled)--